

REMARKS

Status of Claims

Claims 1 and 4-14 are pending, of which claims 1 and 11 are independent. Claims 11-13 have been withdrawn.

Claims 1, 4-5 and 7 have been amended to correct informalities in claim language and to more clearly define the present subject matter. Claim 1 has been amended to incorporate the subject matter of original claim 2. Claims 2 and 3 have been cancelled without prejudice. New claim 14 has been added. Care has been taken to avoid introducing new matter.

Rejections under 35 U.S.C. § 112

Claims 2, 4 and 7 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants respectfully submit that the amendments made to claim 4 address the issues and concerns raised by the Examiner, and thus claims 4 and 7 are definite under 35 U.S.C. § 112, second paragraph.

Rejections under 35 U.S.C. § 102

Claims 1-5 and 7-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Uchiyama (USP 4,813,989). This rejection is traversed for at least the following reasons.

Applicants respectfully submit that Uchiyama fails to disclose the pattern-control and feedback-control as recited by claim 1. The Examiner asserts that Uchiyama inherently discloses the claimed pattern control. Specifically, the Examiner asserts that the amount of material exhausted is controlled by the controlled amount of material deposited and the controlled amount of material input. Applicants disagree. It should be noted that claim 1 recites that the pattern-control is performed “*according to a flow rate pattern corresponding to heating positions on*

the silica glass pipe.” In the present disclosure, a flow rate pattern is obtained for the corresponding heating position on the silica glass pipe, for example, on the basis of the calculation pattern, which is preliminary obtained by experiments (see, for example, paragraphs [0027] and [0028] of the specification). In contrast, it is clear that Uchiyama does not obtain or determine any flow rate pattern for the corresponding heating position on the silica glass pipe. In other words, Uchiyama fails to expressly or inherently disclose the flow rate pattern correspond to heating position on the silica glass pipe. It is submitted that neither the controlled amount of material deposited nor the controlled amount of material input corresponds to the claimed flow rate pattern corresponding to heating position. As such, Uchiyama does not pattern-control at least the other one of the amount of the exhaust gas from the exhaust portion and the amount of the buffering gas introduced in the buffering gas inlet portion *according to a flow rate pattern corresponding to heating positions on the silica glass pipe.* Thus, it is clear that Uchiyama fails to disclose the claimed pattern-control.

Further, Applicants respectfully submit that Uchiyama fails to disclose that the feedback-control is performed so that “*the measured internal pressure coincides with a targeted value which is set for each heating position,*” as recited by claim 1. It is clear that Uchiyama fails to disclose the target value is set for each heating position. In other words, Uchiyama fails to disclose or suggest that the target value changes along the heating position. Thus, it is clear that Uchiyama fails to disclose the claimed feedback-control.

Accordingly, claim 1 and all claims dependent thereon are patentable over Uchiyama. Thus, it is requested that the Examiner withdraw the rejection of claims 1-5 and 7-10 under 35 U.S.C. § 102(b).

Rejections under 35 U.S.C. § 103

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchiyama. Applicants incorporate herein the arguments previously advanced in traversal of the rejection under 35 U.S.C. § 102(b) predicated upon Uchiyama. Dependent claim 6 is free from the applied art in view of their dependency from independent claim 1. Thus, Applicants respectfully request that the Examiner withdraw the rejection of claim 6.

New Claim

Since new claim 14 depends upon claim 1, this claim is patentable over the prior art for at least the same reasons as claim 1. Further, since it is clear that Uchiyama does not obtain the flow rate pattern based on a predetermined calculation pattern and position information of the heating position, claim 14 is patentable on its own merit.

Conclusion

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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